## **LMA District Cover Sheet**

**Spring 2018 Levee Inspection Results** 

## **Reclamation District No. 2075 McMullin**

	Spring (March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)				
,	** Non-receipt of Summ Reports may effect or			
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated	ratings are not detern d using the same crite			ual maintenance
FALL INSPECTIONS: The overall maintena within the attached u			tion and maintenance de ended to be an indiction	
Comments				

## **Unit Cover Sheet**

**Spring 2018 Levee Inspection Results** 

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Right	7.45

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	5/24/2018 - 5/24/2018			
DWR Inspector	Richard Willoughby			
Accompanied By	Loren Haworth			
	Brian Mizuno			

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

## http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

## Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2075 McMullin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start		Rating **	Α	Issue No.		9
LM End		Issue Type +	Ma	Location *		N/A
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item		s & Maintena	nce		0	37.744860 °
пеш	Manuals				0	-121.289828 °
DWR ID DWR_RD2075_01_f _ 2014_9						
		Comn	nent Cod	de		
		Inspecto	or Comm	nent		
RD 2075 h	as the O&	M Manual on	file.			

No Photos

LM Start		Rating **	Α	Issue No.		10	
LM End		Issue Type +	Ma	Location *			
Cotogon Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Emergency Supplies &			0		0	
пеш	Equipmen	nt			0		0
DWR ID	DWR_RD2	075_01_f _ 201	4_10				
	Comment Code						

No Photos

Inspector Comment RD 2075 has emergency supplies stored in their building.

LM Start		Rating **	Α	Issue No.		11	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	.evee		GPS La	atitud	le/Longitude	
Category				Start		End	
ltom	Flood Pre	paredness &		0		0	
item	Item				0		0
DWR ID	DWR_RD2	075_01_f _ 201	4_11				
		Comn	nent Cod	le			

No Photos

Inspector Comment

2075 has regular training for their work crews

RD 2075 has regular training for their work crews, they don't have district crew only trustees, landowners and farmers.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2075 McMullin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	0.00	Rating **	М	Issue No.		24	
LM End	7.44	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	Vegetation			55°	37.710188°	
пеш					13°	-121.268387 °	
DWR ID	DWR_RD2	075_01_s _ 201	8_24				
		Comn	nent Cod	le			
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slo	pes a	and	
easements	S.						
	Inspector Comment						
Control wil	Control wild growth on levee slope.						

No Photos

LM Start	0.00	Rating **	М	Issue No.		25		
LM End	7.44	Issue Type +	Ma	Location *		WS		
Category Earthen Levee			GPS Latitude/Longitude					
Category			Start		End			
Item	Vegetation			37.7495	55 °	37.710188°		
пеш				-121.2889	13 °	-121.268387 °		
DWR ID	DWR_RD2	075_01_s _ 201	8_25					
	Comment Code							
V1 : Contro	V1 : Control annual grass and weeds on the levee slopes and							

No Photos

Inspector Comment Control wild growth on levee slope.

easements.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	0.12	Rating **	М	Issue No.		30
LM End	0.12	Issue Type +	Ma	Location *		
Category	Suppleme	Supplemental				e/Longitude
Calegory			Start		End	
Item	DWR UC	P LMA Respo	onsibility	37.74820	0 °	37.748200°
пеш				-121.28971	7 °	-121.289717°
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:24663 DS\_ID:24735 EP\_NO: 4736

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pipe not visible on waterside.- no access to concrete riser on waterside.- blocked siphon breaker.

FIELD\_STRUCT\_DESC: 14-inch coated steel drainage discharge pipe through the levee, 4 feet below the crown. Two concrete cutoff walls. Pump mounted on a pile structure in the drainage ditch on the landside (LS). Siphon breaker in a concrete riser on the waterside (WS) slope. Concrete distribution box at the WS toe. (Plans for removing and replacing an existing drainage pipe through the levee authorized under Permit No. 4736, 1964 - Reclamation District No. 2075). [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 0.12), 12-inch pipe

referenced]. FS Date: 11/13/2013

LM Start	0.12	Rating **	М	Issue No.	30 (cont)
LM End	0.12	Issue Type +	Ma	Location *	

## Photo 1 of 3: UCIP\_SP\_2018\_24663\_44022.jpg



WS view: concrete standpipe (top) and concrete pipe riser (bottom) on levee slope.

## Photo 2 of 3: UCIP\_SP\_2018\_24663\_44021.jpg



WS view: concrete pipe riser with siphon breaker on levee slope.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	0.12	Rating **	М	Issue No.		30 (cont)	
LM End	0.12	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	37.7482	00°	37.748200	0
пеш				-121.2897	17°	-121.289717	0
DWR ID							

#### Comment Code

#### Inspector Comment

FS ID:24663 DS\_ID:24735 EP NO: 4736

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pipe not visible on waterside.- no access to

concrete riser on waterside. - blocked siphon breaker.

FIELD\_STRUCT\_DESC: 14-inch coated steel drainage discharge pipe through the levee, 4 feet below the crown. Two concrete cutoff walls. Pump mounted on a pile structure in the drainage ditch on the landside (LS). Siphon breaker in a concrete riser on the waterside (WS) slope. Concrete distribution box at the WS toe. (Plans for removing and replacing an existing drainage pipe through the levee authorized under Permit No. 4736, 1964 - Reclamation District No. 2075). [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 0.12), 12-inch pipe referenced].

FS Date: 11/13/2013

## Photo 3 of 3: UCIP\_SP\_2018\_24663\_44020.jpg



LS view: walkway, pump, service pole, and intake structure.

LM Start	0.99	Rating **	A/W	Issue No.	13	
LM End	1.00	Issue Type +	Ma	Location *	LS	
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory		Start		End		
Item	Trim / Thi	n Trees		37.7400	15°	37.739830°
пеш				-121.2812	43 °	-121.281217°
DWR ID	DWR ID DWR_RD2075_01_f _ 2016_13					
Comment Code						

## T4: Trim trees over roadway to at least 12 feet above ground level.

## Inspector Comment

Trees have been trimmed to allow inspection and access.

## Photo 1 of 1: SP\_2018\_RD2075\_315\_13\_20180503\_00008.jpg



Trees have been trimmed to allow inspection and access.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	1.06	Rating **	A/W	Issue No.		17	
LM End	1.06	Issue Type +	Ма	Location *		LS	
Category	Earthen L	arthen Levee			GPS Latitude/Longitude		
Calegory	biy			Start		End	
Item	Trim / Thi	n Trees		37.7390	73 °	37.739073 °	
пеш			-121.28162	20°	-121.281620 °		
DWR ID	VR ID DWR_RD2075_01_f _ 2016_17						

#### Comment Code

T4: Trim trees over roadway to at least 12 feet above ground level.

## Inspector Comment

Trees trimmed to allow inspection and access.

#### Photo 1 of 1: SP\_2018\_RD2075\_315\_17\_20180503\_00021.jpg



Trees trimmed to allow inspection and access.

LM Start	1.55	Rating **	U	Issue No.		29
LM End	1.63	Issue Type + Ma		Location *		LS
Category	Earthen L		GPS Latitude/Longitude			
Calegory						End
Item	Vegetatio	n		37.7344	70°	37.734213°
item				-121.2862	30°	-121.287660 °
DWR ID	DWR_RD2075_01_s _ 2018_29					

## Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Wild growth at landward toe blocking view and should cleared fifteen feet for landward toe.

LM Start	1.55	Rating **	U	Issue No.	29 (cont)
LM End	1.63	Issue Type +	Ma	Location *	LS

## Photo 1 of 3: SP\_2018\_RD2075\_315\_29\_20180525\_00065.jpg



Looking west at dense veg at landward toe. (Spring 2018)

## Photo 2 of 3: SP\_2018\_RD2075\_315\_29\_20180525\_00064.jpg



Looking west at dense veg. at landward toe. (Spring 2018)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	1.55	Rating **	U	Issue No.		29 (cont)
LM End	1.63	Issue Type + Ma		Location *		LS
Category	Earthen L	evee		GPS Latitude/Longitude		
Calegory				Start		End
Item	Vegetatio	n		37.7344	70°	37.734213 °
пеш				-121.2862	30°	-121.287660 °
DWR ID	DWR ID DWR_RD2075_01_s _ 2018_29					

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Wild growth at landward toe blocking view and should cleared fifteen feet for landward toe.

## Photo 3 of 3: SP\_2018\_RD2075\_315\_29\_20180525\_00066.jpg



Looking northeast at dense veg at landward toe. (Spring 2018)

LM Start	1.58	Rating **	М	Issue No.		12
LM End	1.67	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	2017 Stor	m Damage		37.7343	53°	37.734463 °
пеш				-121.2867	20°	-121.288258 °
DWR ID	DWR_RD2	075_01_f _ 201	7_12			

## Comment Code

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:575

Site Designation:LMA-481

Repair Type: Erosion

Rating: Area of Concern

Field Date:8/10/2017

Notes: 10/23/17: According to LMA and my observations at LM 1.63, this site never had riprap (contrary to previous comments). Erosion has encroached into levee prism. Future high water and wavewash will likely advance erosion further into prism. Repairs should be made prior to next high water.

# Photo 1 of 4: LEVAL\_SP\_2018\_575\_4241.jpg



## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	1.58	Rating **	М	Issue No.	12 (cont)			
LM End	1.67	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	ory			Start		End		
Item	2017 Stor	m Damage		37.7343	53 °	37.734463 °		
пеш			·		-121.288258 °			
DWR ID	DWR ID DWR_RD2075_01_f _ 2017_12							
		Comn	nent Cod	de				

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:575

Site Designation:LMA-481

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes: 10/23/17: According to LMA and my observations at LM 1.63, this site never had riprap (contrary to previous comments). Erosion has encroached into levee prism. Future high water and wavewash will likely advance erosion further into prism. Repairs should be made prior to next high water.

LM Start	1.58	Rating **	М	Issue No.	12 (cont)
LM End	1.67	Issue Type +	Ma	Location *	



Photo 3 of 4: LEVAL\_SP\_2018\_575\_4246.jpg



CR: Crown

Rating A: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

Issue Type Ma : Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	1.58	Rating **	М	Issue No.		12 (cont)
LM End	1.67	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	2017 Stor	m Damage		37.73435	3°	37.734463°
Item				-121.28672	0 °	-121.288258 °
DWR ID	DWR_RD2	075_01_f _ 201	7_12			

## Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:575

Site Designation:LMA-481

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes: 10/23/17: According to LMA and my observations at LM 1.63, this site never had riprap (contrary to previous comments). Erosion has encroached into levee prism. Future high water and wavewash will likely advance erosion further into prism. Repairs should be made prior to next high water.

## Photo 4 of 4 : SP\_2018\_RD2075\_315\_12\_20180503\_00007.jpg



10/23/17: According to LMA and my observations at LM 1.63, this site never had riprap (contrary to previous comments). Erosion has encroached into levee prism. Future high water and wavewash will likely advance erosion further into prism. Repairs should be made prior to next high water.

LM Start	2.32	Rating **	М	Issue No.		31
LM End	2.32	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Category				Start End		End
Item	DWR UC	IP LMA Respo	onsibility	37.73131	4 °	37.731314°
item				-121.29371	3 °	-121.293713 °
DWR ID						

## Inspector Comment

Comment Code

FS\_ID:24666 DS\_ID:24737 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - service pole on landside.- looks abandoned.

Walkway in dilapidated condition.

FIELD\_STRUCT\_DESC: 16-inch steel drainage discharge pipe through the levee, 4.5 feet below the crown. Corrugated metal cutoff wall. Pump mounted on a pile structure in a drainage ditch on the landside (LS). Siphon breaker in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 2.30)].

FS Date: 11/13/2013

#### Photo 1 of 3: UCIP\_SP\_2018\_24666\_45600.jpg



WS view: concrete standpipe (top) and steel pipe riser (bottom marked) on levee slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2075 McMullin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	2.32	Rating **	М	Issue No.		31 (cont)	
LM End	2.32	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	itud	le/Longitude	
Calegory				Start End		End	
Item	DWR UC	IP LMA Respo	onsibility	37.73131	4°	37.731314	0
пеш				-121.29371	3°	-121.293713	0
DWR ID							

## Comment Code

## Inspector Comment

FS\_ID:24666 DS\_ID:24737 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - service pole on landside.- looks abandoned.

Walkway in dilapidated condition.

FIELD\_STRUCT\_DESC: 16-inch steel drainage discharge pipe through the levee, 4.5 feet below the crown. Corrugated metal cutoff wall. Pump mounted on a pile structure in a drainage ditch on the landside (LS). Siphon breaker in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 2.30)].

FS Date: 11/13/2013

LM Start	2.32	Rating **	М	Issue No.	31 (cont)
LM End	2.32	Issue Type +	Ma	Location *	

# Photo 2 of 3: UCIP\_SP\_2018\_24666\_44030.jpg



WS view: blocked siphon breaker in steel pipe riser on levee slope.

#### Photo 3 of 3: UCIP\_SP\_2018\_24666\_44029.jpg



WS view: concrete standpipe on levee toe.

## Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2075 McMullin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	2.32	Rating **	A/W	Issue No.		15
LM End	2.78	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start	End	
Item	2017 Stor	m Damage		37.7312	00°	37.724900 °
пеш				-121.2934	00°	-121.293800 °
DWR ID	DWR_RD2075_01_f _ 2017_15					
Comment Code						

## Inspector Comment

Levee Evaluation Comments

Description:Sinkholes have formed along the landside levee toe as a result of the high water. The cause of the sinkholes is not clear, but a similar phenomenon in this area is believed to have caused the levee breach earlier this year. Further geotechnical investigation is needed. Site ID No:479

Site Designation:LMA-306 Repair Type: Stability Rating:Area of Concern Field Date:7/26/2017

Notes: Sink holes appear to have already been filled. 10/23/17: LMA has removed pipes (parallel to levee) in this area, and drainage ditch has been relocated to approx 60 feet away from levee toe. Known sandy soils in region may contribute to sinkholes.

LM Start	2.32	Rating **	A/W	Issue No.	15 (cont)
LM End	2.78	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL\_SP\_2018\_479\_2215.jpg



## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	2.32	Rating **	A/W	Issue No.		15 (cont)	
LM End	2.78	Issue Type +	Ma	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	2017 Stor	m Damage		37.73120	00°	37.724900°	
пеш				-121.29340	00°	-121.293800 °	
DWR ID	DWR_RD2	R_RD2075_01_f _ 2017_15					
	Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description:Sinkholes have formed along the landside levee toe as a result of the high water. The cause of the sinkholes is not clear, but a similar phenomenon in this area is believed to have caused the levee breach earlier this year. Further geotechnical investigation is needed. Site ID No:479

Site Designation:LMA-306 Repair Type: Stability Rating:Area of Concern Field Date:7/26/2017

Notes: Sink holes appear to have already been filled. 10/23/17: LMA has removed pipes (parallel to levee) in this area, and drainage ditch has been relocated to approx 60 feet away from levee toe. Known sandy soils in region may contribute to sinkholes.

#### Photo 3 of 3: SP\_2018\_RD2075\_315\_15\_20180503\_00017.jpg



10/23/17: LMA has removed pipes (parallel to levee) in this area, and drainage ditch has been relocated to approx 60 feet away from levee toe. Known sandy soils in region may contribute to sinkholes.

LM Start	2.74	Rating **	A/W	Issue No.		16
LM End	2.84	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	m Damage		37.72520	°	37.724000 °
пеш				-121.29440	°	-121.293200 °
DWR ID	DWR_RD2	075_01_f _ 201	7_16			

#### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.

Site ID No:480

Site Designation:LMA-307

Repair Type: Erosion

Rating: Area of Concern

Field Date:7/26/2017

Notes: Low priority because of the wide berm. Could not see all of the bank because of vegetation. Rock was placed on LS here during this years storms.

#### Photo 1 of 3: LEVAL\_SP\_2018\_480\_2206.jpg



* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	2.74	Rating **	A/W	Issue No.		16 (cont)
LM End	2.84	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	2017 Stor	m Damage		37.7252	00°	37.724000 °
пеш				-121.2944	00°	-121.293200 °
DWR ID	DWR_RD2075_01_f _ 2017_16					
Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.

Site ID No:480

Site Designation:LMA-307 Repair Type: Erosion Rating:Area of Concern Field Date:7/26/2017

Notes: Low priority because of the wide berm. Could not see all of the bank because of vegetation. Rock was placed on LS here during this years storms.

LM Start	2.74	Rating **	A/W	Issue No.	16 (cont)
LM End	2.84	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL\_SP\_2018\_480\_2209.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiency

Ob: Design & System Obsolescence

En: Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	2.77	Rating **	A/W	Issue No.		14	
LM End	2.83	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	le/Longitude		
Calegory	gory			Start		End	
Item	2017 Stor	m Damage		37.72481	0 °	37.724207°	
пеш				-121.29415	0°	-121.293308°	
DWR ID	DWR_RD2075_01_f _ 2017_14						
Comment Code							

## Inspector Comment

Levee Evaluation Comments

Description: Site ID No:81

Site Designation:LMA-35 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: no damage present 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

LM Start	2.77	Rating **	A/W	Issue No.	14 (cont)
LM End	2.83	Issue Type +	Ma	Location *	



Photo 2 of 6: LEVAL\_SP\_2018\_81\_1341.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	2.77	Rating **	A/W	Issue No.	14 (cont)		
LM End	2.83	Issue Type +	Ma	Location *			
Category	ental	GPS Latitude/Longitude					
Category				Start		End	
Item	2017 Stor	m Damage		37.72481	0°	37.724207°	
пеш				-121.29415	° 0	-121.293308 °	
DWR ID	DWR_RD2075_01_f _ 2017_14						
Comment Code							

## Inspector Comment

Levee Evaluation Comments

Description: Site ID No:81

Site Designation:LMA-35 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: no damage present 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

LM Start	2.77	Rating **	A/W	Issue No.	14 (cont)
LM End	2.83	Issue Type +	Ma	Location *	



Photo 4 of 6 : SP\_2018\_RD2075\_315\_14\_20180503\_00012.jpg



View down through erosion rut in bank. 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	2.77	Rating **	A/W	Issue No.	14 (cont)	
LM End	2.83	Issue Type +	Ma	Location *		
Category	ental	GPS La	titud	le/Longitude		
Category			Start		End	
Item	2017 Stor	m Damage		37.7248	10°	37.724207 °
пеш				-121.2941	50°	-121.293308 °
DWR ID	DWR_RD2	_RD2075_01_f _ 2017_14				
Comment Code						

## Inspector Comment

Levee Evaluation Comments

Description: Site ID No:81

Site Designation:LMA-35 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: no damage present 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

LM Start	2.77	Rating **	A/W	Issue No.	14 (cont)
LM End	2.83	Issue Type +	Ma	Location *	

## Photo 5 of 6: SP\_2018\_RD2075\_315\_14\_20180503\_00013.jpg



View upstream showing narrow distance between levee toe and vertical bank. 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

#### Photo 6 of 6: SP 2018 RD2075 315 14 20180503 00014.jpg



View upstream showing narrow distance between levee toe and vertical bank. 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	3.86	Rating **	М	Issue No.		32	
LM End	3.86	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		37.71374	4°	37.713744°	
пеш				-121.28071	2 °	-121.280712°	
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:41721 DS\_ID:24746 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Several concrete structure with Alfalfa valve. Only steel pipe visible on river bank. Service pole on waterside.New field

discovered crossing.

FIELD\_STRUCT\_DESC: 10-inch polyvinyl chloride (PVC) irrigation discharge pipe through the levee, at an unknown depth. Slant pump on the riverbank. Distribution box on the waterside (WS) berm. Concrete U-shaped headwall and open outlet on the landside (LS) toe. Crossing was field discovered. (Plans to install a slant pump on the riverbank authorized under Permit No. 5484, 1966 - Jack Clinton).

FS Date: 11/13/2013

LM Start	3.86	Rating **	М	Issue No.	32 (cont)
LM End	3.86	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2018\_41721\_45982.jpg



WS view: slant pump and concrete distribution box on levee berm.

## Photo 2 of 3: UCIP\_SP\_2018\_41721\_45981.jpg



WS view: slant pump on timber pile in the stream.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	3.86	Rating **	М	Issue No.		32 (cont)
LM End	3.86	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		37.7137	44 °	37.713744°
пеш				-121.2807	12 °	-121.280712 °
DWR ID						

## Comment Code

#### Inspector Comment

FS\_ID:41721 DS\_ID:24746 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Several concrete structure with Alfalfa valve. Only steel pipe visible on river bank. Service pole on waterside.New field

discovered crossing.

FIELD\_STRUCT\_DESC: 10-inch polyvinyl chloride (PVC) irrigation discharge pipe through the levee, at an unknown depth. Slant pump on the riverbank. Distribution box on the waterside (WS) berm. Concrete Ushaped headwall and open outlet on the landside (LS) toe. Crossing was field discovered. (Plans to install a slant pump on the riverbank authorized under Permit No. 5484, 1966 - Jack Clinton).

FS Date: 11/13/2013



LS view: concrete U type headwall on levee toe and open PVC pipe.

LM Start	3.90	Rating **	A/W	Issue No.	18	
LM End	3.95	Issue Type +	Ma	Location *		
Category Supplemental GPS Latitude/Longitude						le/Longitude
Category				Start		End
Item	2017 Stor	m Damage		37.71338	38°	37.713492 °
пеш				-121.28001	18 °	-121.278982 °
DWR ID DWR_RD2075_01_f _ 2017_18						·
Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

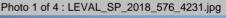
Site ID No:576

Site Designation:LMA-482 Repair Type: Erosion

Rating:Area of Concern Field Date:8/10/2017

Notes: 10/23/17: There was no riprap in this area. Erosion sites have

been repaired by LMA.





* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	3.90	Rating **	A/W	Issue No.	18 (cont)			
LM End	3.95	Issue Type +	Ма	Location *				
Category	Suppleme	ental	ıl		titud	le/Longitude		
Calegory				Start		End		
Item	2017 Stor	m Damage		37.7133	38°	37.713492		
пеш				-121.2800°	18 °	-121.278982		
DWR ID DWR_RD2075_01_f _ 2017_18								
	Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:576

Site Designation:LMA-482

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes: 10/23/17: There was no riprap in this area. Erosion sites have been repaired by LMA.

LM Start	3.90	Rating **	A/W	Issue No.	18 (cont)
LM End	3.95	Issue Type +	Ma	Location *	



Photo 3 of 4: LEVAL\_SP\_2018\_576\_4238.jpg



## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	3.90	Rating **	A/W	Issue No.		18 (cont)	
LM End	3.95	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	2017 Stor	2017 Storm Damage			88°	37.713492 °	
пеш				-121.2800°	18 °	-121.278982 °	
DWR ID	DWR_RD2	075_01_f _ 201	7_18				

## Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:576

Site Designation:LMA-482

Repair Type: Erosion

Rating:Area of Concern Field Date:8/10/2017

Notes: 10/23/17: There was no riprap in this area. Erosion sites have been repaired by LMA.

Photo 4 of 4: SP\_2018\_RD2075\_315\_18\_20180503\_00025.jpg



10/23/17: There was no riprap in this area (contrary to previous comment). Erosion sites have been repaired by LMA.

LM Start	4.00	Rating **	A/W	Issue No.		19
LM End	4.04	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	m Damage		37.71404	8°	37.714630°
пеш				-121.27836	° S	-121.278263 °
DWR ID	DWR_RD2	075_01_f _ 201	7_19			

#### Inspector Comment

Comment Code

Levee Evaluation Comments

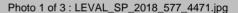
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:577

Site Designation:LMA-483 Repair Type: Erosion

Rating:Area of Concern Field Date:8/10/2017

Notes:





Location	
LS: Land Side	N/A: Not Applicable
MS · Mator Sido	

CR : Crown

: Acceptable Minimally Acceptable N: Not Inspected/Rated

C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type

Ma : Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	4.00	Rating **	A/W	Issue No.		19 (cont)	
LM End	4.04	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		37.71404	3°	37.714630	0
пеш				-121.27836	3°	-121.278263	0
DWR ID	DWR_RD2	075_01_f _ 201	7_19				

#### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:577

Site Designation:LMA-483

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:

LM Start	4.00	Rating **	A/W	Issue No.	19 (cont)
LM End	4.04	Issue Type +	Ma	Location *	

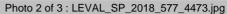




Photo 3 of 3: LEVAL\_SP\_2018\_577\_4475.jpg



## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	4.95	Rating **	A/W	Issue No.		20	
LM End	5.20	Issue Type +	Ob	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Category			Start		End		
Item	2017 Stor	m Damage		37.727200°		37.728900	0
пеш				-121.2778	00°	-121.275200	0
DWR ID	DWR_RD2075_01_f _ 2017_20						
	Comment Code						

## Inspector Comment

Levee Evaluation Comments

Description:Heavy seepage was observed during the high water this year.

Site ID No:481

Site Designation:LMA-308 Repair Type: Seepage Rating:Area of Concern Field Date:7/26/2017

Notes: No evidence of flood fight here, but the orchard trees next to the levee are looking a little yellow compared to the others.

LM Start	4.95	Rating **	A/W	Issue No.	20 (cont)
LM End	5.20	Issue Type +	Ob	Location *	



Photo 2 of 3: LEVAL\_SP\_2018\_481\_2199.jpg



+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	4.95	Rating **	A/W	Issue No.		20 (cont)	
LM End	5.20	Issue Type +	Ob	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory	,			Start		End	
Item	2017 Stor	m Damage		37.7272	00°	37.728900 °	
пеш				-121.2778	00°	-121.275200 °	
DWR ID	DWR_RD2	DWR_RD2075_01_f _ 2017_20					
Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description:Heavy seepage was observed during the high water this year.

Site ID No:481

Site Designation:LMA-308 Repair Type: Seepage Rating:Area of Concern Field Date:7/26/2017

Notes: No evidence of flood fight here, but the orchard trees next to the

levee are looking a little yellow compared to the others.



LM Start	5.20	Rating **	М	Issue No.		33		
LM End	5.20	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	DWR UC	P Field Study		37.728853°		37.728853	0	
item				-121.2752	20°	-121.275220	0	
DWR ID								
Comment Code								

## Inspector Comment

FS\_ID:50209 DS\_ID:24739 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - flap gates in concrete box on LS toe have failed and are open. Rusted through flapgate may indicate condition of interior of pipe.

FIELD\_STRUCT\_DESC: 1 of 2: 16-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Pump mounted on a pile structure in the river. Wooden walkway to the pump. Siphon breaker and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005, 18-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.16), 18-inch pipe referenced].

FS Date: 6/21/2016

## Photo 1 of 3: UCIP\_SP\_2018\_50209\_45603.jpg



WS view: two pipes, walkway to pump and pile structure in the stream.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.20	Rating **	М	Issue No.		33 (cont)		
LM End	5.20	Issue Type +	En	Location *		Location *		
Category	Suppleme	ental	GPS Latitude/		e/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		37.72885	3°	37.728853		
пеш				-121.27522	o°	-121.275220		
DWR ID								

#### Comment Code

#### Inspector Comment

FS\_ID:50209 DS\_ID:24739 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - flap gates in concrete box on LS toe have failed and are open. Rusted through flapgate may indicate condition of interior of nine.

FIELD\_STRUCT\_DESC: 1 of 2: 16-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Pump mounted on a pile structure in the river. Wooden walkway to the pump. Siphon breaker and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005, 18-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.16), 18-inch pipe referenced].

FS Date: 6/21/2016

LM Start	5.20	Rating **	М	Issue No.	33 (cont)
LM End	5.20	Issue Type +	En	Location *	

## Photo 2 of 3: UCIP\_SP\_2018\_50209\_45602.jpg



LS view: siphon breakers in concrete pipe risers (bottom) on levee slope. Concrete distribution box on levee toe (top).

#### Photo 3 of 3: UCIP\_SP\_2018\_50209\_45605.jpg



LS view: siphon breaker in concrete pipe riser on levee slope.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.20	Rating **	М	Issue No.		34
LM End	5.20	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		37.72884	8°	37.728848
пеш					5°	-121.275195 °
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:25184 DS\_ID:24743 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Flap gate lid displaced.

FIELD\_STRUCT\_DESC: 2 of 2: 16-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Pump mounted on a pile structure in the river. Wooden walkway to the pump. Siphon breaker and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005, 18-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.16), 18-inch pipe referenced].

FS Date: 11/13/2013

LM Start	5.20	Rating **	М	Issue No.	34 (cont)
LM End	5.20	Issue Type +	En	Location *	



WS view: two pipes, walkway to pump and pile structure in the stream.



WS view: closer view of two pumps and platform in the stream.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.20	Rating **	М	Issue No.		34 (cont)
LM End	5.20	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		37.72884	8°	37.728848 °
пеш				-121.27519	5 °	-121.275195°
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:25184 DS\_ID:24743 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Flap gate lid displaced.

FIELD STRUCT DESC: 2 of 2: 16-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Pump mounted on a pile structure in the river. Wooden walkway to the pump. Siphon breaker and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005, 18-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.16), 18-inch pipe referenced].

FS Date: 11/13/2013

## Photo 3 of 3: UCIP\_SP\_2018\_25184\_45606.jpg



LS view: siphon breakers in concrete pipe risers (bottom) on levee slope. Concrete distribution box on levee toe (top).

LM Start	5.24	Rating **	A/W	Issue No.		21	
LM End	5.29	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Calegory		Start		End			
Item	2017 Storm Damage		37.72846	0°	37.727799	0	
Item				-121.27467	'1 °	-121.274252	0
DWR ID	DWR_RD2	075_01_f _ 201	7_21				

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:578

Lo

WS: Water Side

CR: Crown

Site Designation:LMA-484 Repair Type: Erosion Rating: Area of Concern Field Date:8/10/2017 Notes: Paved road on levee.

Comment Code

Photo 1 of 3: LEVAL\_SP\_2018\_578\_4248.jpg

cation		** Rating		+ Issu
ahi2 has I · 2	N/A · Not Applicable	A · Accentable	N · Not Inspected/Rated	Ma ·

M : Minimally Acceptable C : Corrected A/W: Acceptable but Monitor & Maintain ue Type

Maintenance Deficiency Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2075 McMullin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.24	Rating **	A/W	Issue No.	21 (cont)	
LM End	5.29	Issue Type +	Ma	Location *		
Catagony	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	2017 Stor	2017 Storm Damage			60°	37.727799°
пеш			-121.274671 °		-121.274252 °	
DWR ID	DWR_RD2075_01_f _ 2017_21					
Comment Code						

## Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:578

Site Designation:LMA-484

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017 Notes: Paved road on levee.

LM Start	5.24	Rating **	A/W	Issue No.	21 (cont)
LM End	5.29	Issue Type +	Ma	Location *	

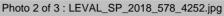




Photo 3 of 3: LEVAL\_SP\_2018\_578\_4257.jpg



## Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2075 McMullin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.26	Rating **	A/W	Issue No.		23	
LM End		Issue Type +	Ma	Location *			
Catagony	Category			GPS Latitude/Longitude			
Calegory		Start		End			
Item	2017 Stor	m Damage		37.72821	6°		0
пеш		-121.27443	4 °		0		
DWR ID	DWR_RD2	075_01_f _ 201	7_23				
Comment Code							

## Inspector Comment

Levee Evaluation Comments

Description: Site ID No:79 Site Designation:LMA-33 Repair Type: Erosion Rating:Area of Concern

Rating:Area of Concern Field Date:6/8/2017 Notes: no damage present

LM Start	5.26	Rating **	A/W	Issue No.	23 (cont)
LM End		Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL\_SP\_2018\_79\_1335.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2075 McMullin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.26	Rating **	A/W	Issue No.		23 (cont)	
LM End		Issue Type +	Ma	Location *			
Catagory	Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Storm Damage		37.72821	6°		0	
пеш				-121.27443	4 °		0
DWR ID	DWR_RD2	DWR_RD2075_01_f _ 2017_23					
	Comment Code						

## Inspector Comment

Levee Evaluation Comments

Description: Site ID No:79

Site Designation:LMA-33 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017 Notes: no damage present



LM Start	5.27	Rating **	A/W	Issue No.	26		
LM End		Issue Type +	Ob	Location *			
Category	Supplemental			GPS Latitude/Longitude			
				Start		End	
Item	2017 Storm Damage			37.72803	38°		0
пеш				-121.2743	53 °		0
DWR ID	DWR_RD2	075_01_f _ 201	7_26				
Comment Code							

Inspector Comment

Levee Evaluation Comments Description:

Site ID No:80 Site Designation:LMA-34

Repair Type: Seepage Rating:Serious Field Date:8/23/2017

Notes: This site was not visited for seepage, but an erosion site (LMA-33 & LMA-484) at the same location was visited. Sac rings had been placed in the orchard during last year's storm to contain the boils and can be seen in the photos of the other two. No Photos

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.28	Rating **	A/W	Issue No.		1	
LM End	5.29	Issue Type +	Ма	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory	gory		Start		End		
Item	DWR Ero	sion Survey		37.72793	3°	37.727933°	
пеш		-		-121.27449	1°	-121.274491 °	
DWR ID	RD2075U0	1RM64.34					

#### Inspector Comment

Comment Code

09/13/2017: No significant change observed.

07/12/2016: No significant change observed.

08/28/2015: No significant change observed. Loose material is visible at the upper levee slope. The loose soil may have been caused by runoff.

08/18/2014: No significant change observed.

09/10/2013: No significant change observed.

09/13/2012: No significant change observed.

08/18/2011: No significant change observed. Some new material added to the water side levee slope, but the added material is loose and seems not helping the levee protection.

10/05/2010: No significant change observed. Levee slope has minimal vegetation and lacks rip rap protection. Sandy material found on the lower and middle slope is an undesirable material to have on a levee. 08/05/2010: Recommended for annual assessment and monitoring during flood events, per CLRO.

08/20/2009: No major change since last visit; site is located in an oxbow; slope surface consists of very sandy material; there is a tree on site leaning and with exposed tree roots; site is recommended as a local maintenance issue, per CLRO CES Evaluation 2008 Report; Eddy Cordoza from the district is aware of the site and is looking for recommendation; site is previously rated "U".

08/17/2007: Site is close to an irrigation pump inlet. [2017 Site ID:RD2075U01RM64.34]

LM Start	5.28	Rating **	A/W	Issue No.	1 (cont)
LM End	5.29	Issue Type +	Ma	Location *	WS

#### Photo 1 of 3: SP\_2018\_RD2075\_315\_1\_20180503\_00001.jpg



Upstream view of the erosion site.

#### Photo 2 of 3: SP\_2018\_RD2075\_315\_1\_20180503\_00002.jpg



Close view of the site.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.28	Rating **	A/W	Issue No.		1 (cont)
LM End	5.29	Issue Type +	Ма	Location *		WS
Category Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Itom	DWR Ero	sion Survey		37.72793	3°	37.727933
Item		-121.27449	1°	-121.274491		
DWR ID	RD2075U0	1RM64.34				

## Inspector Comment

Comment Code

09/13/2017: No significant change observed.

07/12/2016: No significant change observed.

08/28/2015: No significant change observed. Loose material is visible at the upper levee slope. The loose soil may have been caused by runoff.

08/18/2014: No significant change observed.

09/10/2013: No significant change observed.

09/13/2012: No significant change observed.

08/18/2011: No significant change observed. Some new material added to the water side levee slope, but the added material is loose and seems not helping the levee protection.

10/05/2010: No significant change observed. Levee slope has minimal vegetation and lacks rip rap protection. Sandy material found on the lower and middle slope is an undesirable material to have on a levee. 08/05/2010: Recommended for annual assessment and monitoring during flood events, per CLRO.

08/20/2009: No major change since last visit; site is located in an oxbow; slope surface consists of very sandy material; there is a tree on site leaning and with exposed tree roots; site is recommended as a local maintenance issue, per CLRO CES Evaluation 2008 Report; Eddy Cordoza from the district is aware of the site and is looking for recommendation; site is previously rated "U".

08/17/2007: Site is close to an irrigation pump inlet. [2017 Site ID:RD2075U01RM64.34]

#### Photo 3 of 3: SP\_2018\_RD2075\_315\_1\_20180503\_00003.jpg



Looking upstream at the site.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.56	Rating **	М	Issue No.		35
LM End	5.56	Issue Type +	Ma	Location *		
Category	Supplemental				tud	e/Longitude
Calegory	gory			Start		End
Item	DWR UC	IP LMA Respo	onsibility	37.72487	7°	37.724877°
пеш				-121.27102	5 °	-121.271025°
DWR ID						

# Comment Code

#### Inspector Comment

FS\_ID:50191 DS\_ID:24740 EP\_NO: 3492

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 06/21/2016 Rock revetment placed along WS slope beneath and around pipe; this corrected the levee erosion but still unclear whether the cause of the erosion was addressed. I found no evidence of siphon breaker leakage cited previously. Eddy Cardoza of RD2075 mentioned he saw no leak in and around pipe when the levee slope was repaired. Crossing was been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)11/13/2013 Huge erosion on waterside levee slope due to siphon breaker leakage.It is not 16-inch but 12-inch steel pipe.Pump not mounted on pile structure but mounted on concrete sump.Siphon breaker not in concrete riser but on steel pipe.Pipe is not 8 ft. below the crown but 4 ft below the crown.Looks original pipe was replaced with new crossing. Needs more information from LMA or DWR Inspector. (P. Amatya - DWR)

FIELD\_STRUCT\_DESC: 12-inch asphalt coated steel drainage discharge pipe through the levee, 4 feet below the crown. Concrete cutoff wall. Pump mounted on a concrete sump in a drainage ditch approximately 200 feet off the landside (LS) toe. Siphon breaker on the apex of the pipe through the waterside (WS) slope. (Plans to replace the discharge pipe across the levee authorized under Permit No. 3492, 1960 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary. Plans to replace a 10-horsepower pump and a 10-inch pipe with a larger 15-horsepower pump and a 14-inch steel discharge pipe authorized under Permit No. 3492-A, 1969 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary). [Additional Reference(s): DWR Levee Log, 2005, 16-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.52), 16-inch pipe referenced]. FS Date: 6/21/2016



WS view: siphon breaker on steel pipe on levee slope. Huge soil erosion due to siphon breaker leakage.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.56	Rating **	М	Issue No.		35 (cont)		
LM End	5.56	Issue Type +	Ma	Location *		Location *		
Category	Supplemental			GPS Lat	itud	e/Longitude		
Calegory			Start		End			
Item	DWR UC	IP LMA Respo	onsibility	37.72487	7 °	37.724877°		
пеш				-121.27102	5 °	-121.271025°		
DWR ID								

#### Comment Code

#### Inspector Comment

FS\_ID:50191 DS\_ID:24740 EP\_NO: 3492

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 06/21/2016 Rock revetment placed along WS slope beneath and around pipe; this corrected the levee erosion but still unclear whether the cause of the erosion was addressed. I found no evidence of siphon breaker leakage cited previously. Eddy Cardoza of RD2075 mentioned he saw no leak in and around pipe when the levee slope was repaired. Crossing was been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)11/13/2013 Huge erosion on waterside levee slope due to siphon breaker leakage. It is not 16-inch but 12-inch steel pipe. Pump not mounted on pile structure but mounted on concrete sump. Siphon breaker not in concrete riser but on steel pipe. Pipe is not 8 ft. below the crown but 4 ft below the crown. Looks original pipe was replaced with new crossing. Needs more information from LMA or DWR Inspector. (P. Amatya - DWR)

FIELD\_STRUCT\_DESC: 12-inch asphalt coated steel drainage discharge pipe through the levee, 4 feet below the crown. Concrete cutoff wall. Pump mounted on a concrete sump in a drainage ditch approximately 200 feet off the landside (LS) toe. Siphon breaker on the apex of the pipe through the waterside (WS) slope. (Plans to replace the discharge pipe across the levee authorized under Permit No. 3492, 1960 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary. Plans to replace a 10-horsepower pump and a 10-inch pipe with a larger 15-horsepower pump and a 14-inch steel discharge pipe authorized under Permit No. 3492-A, 1969 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary). [Additional Reference(s): DWR Levee Log, 2005, 16-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.52), 16-inch pipe referenced]. FS Date: 6/21/2016

## Photo 2 of 3 : UCIP\_SP\_2018\_50191\_44261.jpg



LS view: pipe, pump and concrete sump in the drain ditch.

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.56	Rating **	М	Issue No.		35 (cont)		
LM End	5.56	Issue Type +	Ma	Location *		Location *		
Category	Supplemental			GPS Lat	itud	e/Longitude		
Calegory			Start		End			
Item	DWR UC	IP LMA Respo	onsibility	37.72487	7 °	37.724877°		
пеш				-121.27102	5 °	-121.271025°		
DWR ID								

#### Comment Code

#### Inspector Comment

FS ID:50191 DS\_ID:24740 EP NO: 3492

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 06/21/2016 Rock revetment placed along WS slope beneath and around pipe: this corrected the levee erosion but still unclear whether the cause of the erosion was addressed. I found no evidence of siphon breaker leakage cited previously. Eddy Cardoza of RD2075 mentioned he saw no leak in and around pipe when the levee slope was repaired. Crossing was been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)11/13/2013 Huge erosion on waterside levee slope due to siphon breaker leakage. It is not 16-inch but 12-inch steel pipe. Pump not mounted on pile structure but mounted on concrete sump. Siphon breaker not in concrete riser but on steel pipe. Pipe is not 8 ft. below the crown but 4 ft below the crown. Looks original pipe was replaced with new crossing. Needs more information from LMA or DWR Inspector. (P. Amatya - DWR)

FIELD STRUCT DESC: 12-inch asphalt coated steel drainage discharge pipe through the levee, 4 feet below the crown. Concrete cutoff wall. Pump mounted on a concrete sump in a drainage ditch approximately 200 feet off the landside (LS) toe. Siphon breaker on the apex of the pipe through the waterside (WS) slope. (Plans to replace the discharge pipe across the levee authorized under Permit No. 3492, 1960 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary. Plans to replace a 10-horsepower pump and a 10-inch pipe with a larger 15-horsepower pump and a 14-inch steel discharge pipe authorized under Permit No. 3492-A, 1969 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary). [Additional Reference(s): DWR Levee Log, 2005, 16-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.52), 16-inch pipe referenced]. FS Date: 6/21/2016

## Photo 3 of 3: UCIP\_SP\_2018\_50191\_44260.jpg



LS view: closer view of pipe, pump and concrete sump in the drain ditch.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type

Ma: Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.57	Rating **	U	Issue No.		22	
LM End	5.57	Issue Type +	Ma Location *			LS	
Category	GPS Latitude/Longitude						
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.72479	95 °	37.724795	0
пеш				-121.27093	35 °	-121.270935	0
DWR ID DWR_RD2075_01_s _ 2018_22							

#### Comment Code

T1: Trim trees to at least five feet above ground level.

#### Inspector Comment



Looking downstream at untrimmed tree on landward toe. (Spring 2018)

LM Start	5.87	Rating **	A/W	Issue No.		28				
LM End	6.33	Issue Type +	Ma	Location *		Location *		Location *		
Category Supplemental			GPS Latitude/Longitude							
Calegory			Start		End					
Item	2017 Stor	m Damage		37.7217	10°	37.720960 °				
item			-121.2674	90°	-121.259830 °					
DWR ID	DWR RD2	075 01 f 201	7 28							

## Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:579

Site Designation:LMA-485

Repair Type: Erosion Rating:Area of Concern

Field Date:8/10/2017

Notes: Berm present on LS. LMA 486 is combined with this site.

## Photo 1 of 3: LEVAL\_SP\_2018\_579\_4263.jpg



## Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2075 McMullin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	5.87	Rating **	A/W	Issue No.	28 (cont)	
LM End	6.33	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	2017 Stor	m Damage		37.72171	0°	37.720960 °
пеш		-121.267490 ° -121.25				
DWR ID DWR_RD2075_01_f _ 2017_28						
Comment Code						

## Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:579

Site Designation:LMA-485

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes: Berm present on LS. LMA 486 is combined with this site.

LM Start	5.87	Rating **	A/W	Issue No.	28 (cont)
LM End	6.33	Issue Type +	Ma	Location *	

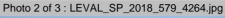




Photo 3 of 3: LEVAL\_SP\_2018\_579\_4275.jpg



## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	6.20	Rating **	A/W	Issue No.		27
LM End	6.33	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	m Damage		37.72208	7°	37.720952°
пеш				-121.26186	3°	-121.259950 °
DWR ID	DWR_RD2	075_01_f _ 201	7_27			

Comment Code

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:580

Site Designation:LMA-486

Repair Type: Erosion Rating:Area of Concern

Field Date:8/10/2017

Notes: Yhis site is combined with LMA 485.

No Photos

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	6.84	Rating **	М	Issue No.		36
LM End	6.84	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	P LMA Respo	onsibility	37.71416	2°	37.714162°
пеш				-121.25922	7 °	-121.259227 °
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:50213 DS\_ID:24742 EP\_NO: 4051

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 06/21/2016: Erosion repaired with rock revetment and crown regraded. Pipe is crushed and deformed on LS. PVC pipe has been removed. Crossing has been downgraded from Urgent to Non-Urgent.11/13/2013:- exposed deformed pipe on landside slope. Soil erosion also occured around the deformed pipe. Walkway at pump on LS toe in poor structural condition.- a temporary 12-inch PVC pipe also found on both sides of the levee.

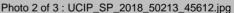
FIELD\_STRUCT\_DESC: 12-inch steel drainage discharge pipe through the levee, 5.5 feet below the crown. Corrugated metal cutoff wall. Pump mounted over a concrete sump at the landside (LS) toe. Siphon breaker in a corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Ditch across the WS berm. 12-inch polyvinyl chloride (PVC) pipe through the levee, 1 foot below the crown, installed for emergency use during the 1986 floods, not found in 2016. (Plans for installation of a 10-inch drainage discharge pipe for a drainage pump over the levee authorized under Permit No. 4051, 1962 - Reclamation District No. 2075). [Additional Reference(s): DWR Levee Log, 2005, 10-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 6.79), 10-inch pipe referenced].

FS Date: 6/21/2016

LM Start	6.84	Rating **	М	Issue No.	36 (cont)
LM End	6.84	Issue Type +	Ma	Location *	

# Photo 1 of 3: UCIP\_SP\_2018\_50213\_45613.jpg

WS view: CMP riser (bottom) on levee shoulder. Steel pipe (top) and temporary pvc pipe on levee slope.





WS view: siphon breaker in CMP riser on levee shoulder.

Location Rating Issue Type LS: Land Side N/A: Not Applicable Ma: Maintenance Deficiency N: Not Inspected/Rated : Acceptable Minimally Acceptable WS: Water Side C: Corrected Ob: Design & System Obsolescence CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

## Levee Inspection Report By Mile - Spring 2018

## Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	05/24/2018 05/24/2018	Richard Willoughby

LM Start	6.84	Rating **	М	Issue No.		36 (cont)	
LM End	6.84	Issue Type +	Ma	Location *			
Category	Supplemental Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	37.71416	2°	37.714162°	
пеш				-121.25922	7 °	-121.259227 °	
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:50213 DS\_ID:24742 EP\_NO: 4051

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 6/21/2016

UCIP Comments: 06/21/2016: Erosion repaired with rock revetment and crown regraded. Pipe is crushed and deformed on LS. PVC pipe has been removed. Crossing has been downgraded from Urgent to Non-Urgent.11/13/2013:- exposed deformed pipe on landside slope. Soil erosion also occured around the deformed pipe. Walkway at pump on LS toe in poor structural condition.- a temporary 12-inch PVC pipe also found on both sides of the levee.

FIELD\_STRUCT\_DESC: 12-inch steel drainage discharge pipe through the levee, 5.5 feet below the crown. Corrugated metal cutoff wall. Pump mounted over a concrete sump at the landside (LS) toe. Siphon breaker in a corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Ditch across the WS berm. 12-inch polyvinyl chloride (PVC) pipe through the levee, 1 foot below the crown, installed for emergency use during the 1986 floods, not found in 2016. (Plans for installation of a 10-inch drainage discharge pipe for a drainage pump over the levee authorized under Permit No. 4051, 1962 - Reclamation District No. 2075). [Additional Reference(s): DWR Levee Log, 2005, 10-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 6.79), 10-inch pipe referenced].

Photo 3 of 3: UCIP\_SP\_2018\_50213\_45614.jpg



LS view: deformed pipe and soil erosion around it (marked bottom). Pipe and pump on pile structure in drain ditch.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency

Ob : Design & System Obsolescence En : Enforcement